Water Temperature, Specific Conductance, pH, and Dissolved Oxygen Concentrations of the Klamath River and Major Tributaries below Iron Gate Dam, 2004

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Abstract

Water quality in the Klamath River basin has been recognized as being impaired and is potentially limiting fishery restoration. Monitoring has taken place since 2001 and continues to define baseline conditions and provide data to support regulatory processes. From June through October 2004, twelve mainstem sites along with six tributaries were monitored for water temperature, specific conductance, pH and dissolved oxygen concentration and percent saturation. Program studies for 2004 also included nutrient grab samples, additional sites for temperature monitoring and attempts to understand effects on water quality from both a pulse flow from Iron Gate Dam, and a turnover event within Iron Gate Reservoir.

Preliminary results shows that during mid summer, water temperatures at all sites within the basin exceed EPA established maximums. Similarly, dissolved oxygen concentrations at all sites were at some point, lower than the NCRWQCB minimum criteria. pH at some sites did exceed maximum pH criteria established by the NCRWQCB. Specific conductance on the other hand did not show signs of regularly exceeding NCRWQCB criteria. Diurnal variations of dissolved oxygen and pH were in general, larger upriver than downriver. Causes to this are likely due to higher primary productivity in the upper reaches caused by a greater availability of nutrients.

Final results will be available in the next few months. These will be posted on the Arcata Fish and Wildlife Service's website: http://arcata.fws.gov/fisheries